November 15, 2001

Doug Smith
Rochester Metal Products Corporation
P.O. Box 318
Rochester, Indiana 46975

Re: Minor Source Modification No:
049-13878-00002

Dear Mr. Smith:

Rochester Metal Products Corporation applied for a Part 70 Operating Permit on December 6, 1996 for a gray iron foundry. An application to modify the limits for the source was received on February 2, 2001. Pursuant to 326 IAC 2-7-10.5, the following are approved for the source:

(a) The pound per hour PM and PM_{10} emission rates for the three (3) electric induction furnaces have been changed to pound per ton limits of 0.0986 pounds of PM per ton of metal melted and 0.0757 pounds of PM_{10} per ton of metal melted.

(b) The Preventive Maintenance Plan requirement has been revised to require a PMP only for the baghouses, DC-9 through DC-13.

(c) Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses, DC-9 through DC-13, shall be maintained within the revised range of 2.0 and 8.0 inches of water or a range established during the latest stack test.

The Minor Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). The source may begin operation upon issuance of the source modification approval.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Mark L. Kramer, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
MLK/MES
cc: File - Fulton County
U.S. EPA, Region V
Fulton County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development - Lisa Lawrence
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Rochester Metal Products Corporation
616 Indiana Avenue
Rochester, Indiana 46975

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 049-13878-00002	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 15, 2001

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in Conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary gray iron foundry source.

Responsible Official:	Don Christenson
Source Address:	616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address:	P.O. Box 318, Rochester, Indiana 46975
General Source Phone Number:	219-223-3164
SIC Code:	3321
County Location:	Fulton
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to operate the following emission units and pollution control devices with the revised limited PM and PM_{10} emission rates for the electric induction furnaces:

Melt Operations, consisting of the following:

(a) Two (2) natural-gas fired preheaters/charge handling system, identified as EU-118, modified in 1996, equipped with a baghouse DC-9, exhausted to Stack DC-9, rated at 7.0 million British thermal units per hour and 14.5 million British thermal units per hour for preheaters 1 and 2, respectively, charge capacity: 34.0 tons per hour of metal total.

(b) Three (3) electric induction furnaces, Nos. 1, 2 and 3, identified as EU-131, EU-132 and EU-133, all modified in 1997, No. 3 modified in 1999, equipped with a baghouse DC-13, exhausted to Stack DC-13, melt capacity: 13 tons per hour of metal total.

Disa 2 Processes, consisting of the following:

(c) One (1) Disa 2 muller and sand system, identified as EU-331, constructed in 1997, equipped with a baghouse DC-11, exhausted to Stack DC-11, capacity: 60.0 tons of sand per hour.

(d) One (1) Disa 2 pouring and mold cooling system, identified as EU-333, constructed in 1997, emissions uncontrolled and exhausted to Stack D333, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(e) One (1) Disa 2 casting, shakeout and cooling system, identified as EU-335, constructed in 1997, equipped with baghouses DC-11 and DC-12, exhausted to Stack DC-11 and

exhausted internally to the building, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(f) One (1) Disa 2 casting handling system, identified as EU-432, constructed in 1997, equipped with a baghouse DC-12, exhausted internally through general ventilation, capacity: 10.0 tons of metal per hour.

Disa Shotblasting and Grinding

(g) One (1) Disa shotblasting system, identified as EU-411B, constructed in 1996, and EU-431, constructed in 1997, equipped with baghouse DC-12, exhausted internally through general ventilation, maximum capacity: 10.0 tons of metal per hour, each.

Magnesium Treatment System

(h) One (1) magnesium treatment system, identified as EU-119, modified in 1997, equipped with a baghouse DC-10, exhausted internally through general ventilation, maximum capacity: 24 tons of metal per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The

records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAM of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.14 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

and

Telephone Number: 219-245-4870 (Northern Regional Office)
Facsimile Number: 219-245-4877

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Melt Operations, consisting of the following:

(a) Two (2) natural-gas fired preheaters/charge handling system, identified as EU-118, modified in 1996, equipped with a baghouse DC-9, exhausted to Stack DC-9, rated at 7.0 million British thermal units per hour and 14.5 million British thermal units per hour for preheaters 1 and 2, respectively, charge capacity: 34.0 tons per hour of metal total.

(b) Three (3) electric induction furnaces, Nos. 1, 2 and 3, identified as EU-131, EU-132 and EU-133, all modified in 1997, No. 3 modified in 1999, equipped with a baghouse DC-13, exhausted to Stack DC-13, melt capacity: 13 tons per hour of metal total.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

(a) The amount of metal melted in the three (3) electric induction furnaces shall not exceed a total of 5,833 tons per month.

(b) The requirement from CP 049-8548, issued October 17, 1997, Condition No. 11(a) that established the amount of metal melted shall not exceed 5,153.8 tons per month has been increased to the amount listed in (a) of this condition as part of modification MSM 049-10821, issued November 3, 1999.

(c) The PM emissions from the three (3) electric induction furnaces, exhausted through Stack DC-13, shall not exceed 0.0986 pounds of PM per ton of metal melted.

(d) The PM_{10} emissions from the three (3) electric induction furnaces, exhausted through Stack DC-13, shall not exceed 0.0757 pounds of PM_{10} per ton of metal melted.

(e) The requirement from MSM 049-12722, issued December 6, 2000, Condition D.1.1(c) that stated that the PM emissions from the three (3) electric induction furnaces, exhausted through Stack DC-13, shall not exceed a total of 0.788 pounds per hour has be replaced by a limit of 0.0986 pounds of PM per ton of metal melted.

(f) The requirement from MSM 049-12722, issued December 6, 2000, Condition D.1.1(d) that stated that the PM_{10} emissions from the three (3) electric induction furnaces, exhausted through Stack DC-13, shall not exceed a total of 0.605 pounds per hour has been replaced by a limit of 0.0757 pounds of PM_{10} per ton of metal melted.

(g) The requirement from CP 049-8548, issued October 17, 1997, Condition No. 11(a) established that the baghouse DC-13 shall operate at all times that the melting process is in operation. Furthermore, the PM emissions from the melting process shall not exceed 1.43 pounds per hour and the PM_{10} emissions from the melting process shall not exceed 1.43 pounds per hour. In addition, MSM 049-10821 stated that the PM_{10} emissions from the melting process shall not exceed 0.788 pounds per hour. These conditions have been replaced by Conditions D.1.1(c) and D.1.1(d).

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following emission units shall be limited by the equations below:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67,}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	**Process Weight Rate** (tons per hour)	**Allowable PM Emission Rate** (pounds per hour)
EU -118 (Preheaters/Charge Handling)	34.0	41.1
EU 131 - 133 (Electric Induction Furnaces	13.0 total	22.9 total

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices, DC-9 and DC-13.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with Conditions D.1.1 and D.1.2, the baghouses (DC-9 and DC-13) for PM control shall be in operation and control emissions from the two (2) preheaters/charge handling system and the three (3) electric induction furnaces at all times that the two (2) preheaters/charge handling system and the three (3) electric induction furnaces are in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, in order to demonstrate compliance with Condition D.1.1(c) and D.1.1(d), the Permittee shall perform PM and PM_{10} testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the baghouses DC-9 and DC-13 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere once per shift. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (DC-9 and DC-13) used in conjunction with the two (2) preheaters/charge handling system and the three (3) electric induction furnaces, at least once per shift when the two (2) preheaters/charge handling system and the three (3) electric induction furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the two (2) preheaters/charge handling system and the three (3) electric induction furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be

considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the two (2) preheaters/charge handling system and the three (3) electric induction furnaces stack exhausts once per shift.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected from exhausting outside of the building to exhausting inside the building or vice versa.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
Disa 2 Processes and Disa Shot Blasting consisting of the following:

(c) One (1) Disa 2 muller and sand system, identified as EU-331, constructed in 1997, equipped with a baghouse DC-11, exhausted to Stack DC-11, capacity: 60.0 tons of sand per hour.

(d) One (1) Disa 2 pouring and mold cooling system, identified as EU-333, constructed in 1997, emissions uncontrolled and exhausted to Stack D333, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(e) One (1) Disa 2 casting, shakeout and cooling system, identified as EU-335, constructed in 1997, equipped with baghouses DC-11 and DC-12, exhausted to Stack DC-11 and exhausted internally to the building, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(f) One (1) Disa 2 casting handling system, identified as EU-432, constructed in 1997, equipped with a baghouse DC-12, exhausted internally through general ventilation, capacity: 10.0 tons of metal per hour.

(g) One (1) Disa shotblasting system, identified as EU-411B, constructed in 1996, and EU-431, constructed in 1997, equipped with baghouse DC-12, exhausted internally through general ventilation, maximum capacity: 10.0 tons of metal per hour, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

(a) The PM emissions for pouring and mold cooling shall not exceed 0.400 pounds per ton of metal.

(b) The PM_{10} emissions for pouring and mold cooling shall not exceed 0.200 pounds per ton of metal.

D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following emission units shall be limited by the equations below:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67,}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	**Process Weight Rate** (tons per hour)	**Allowable PM Emission Rate** (pounds per hour)
EU-331 (Disa 2 Muller & Sand System)	60.0	46.3
EU-333 (Disa 2 Pouring and Mold Cooling)	70.0	47.8
EU-335 (Disa 2 Casting, Shakeout and Cooling)	70.0	47.8
EU-432 (Disa 2 Casting Handling System)	10.0	19.2
EU-411B and EU-431 (Disa Shot Blasting System)	10.0 each	19.2 each

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for control devices, DC-11 and DC-12.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

In order to comply with Conditions D.2.1 and D.2.2, the baghouses (DC-11 and DC-12) for PM control shall be in operation and control emissions from the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting at all times that the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

(a) Visible emission notations of the DC-11 and DC-12 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere once per shift. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (DC-11 and DC-12) used in conjunction with the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting, at least once per shift when the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the Disa 2 muller, sand system, casting, shakeout, cooling and casting handling systems and Disa shot blasting stack exhausts once per shift.

(b) To document compliance with Condition D.2.6, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected from exhausting outside of the building to exhausting inside the building or vice versa.

(c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] Magnesium Treatment System

(h) One (1) magnesium treatment system, identified as EU-119, modified in 1997, equipped with a baghouse DC-10, exhausted internally through general ventilation, maximum capacity: 24 tons of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable pursuant to CP 049-8548, issued October 17, 1997:

(a) The amount of ductile iron treated (EU-119) shall not exceed 210,240 tons per twelve (12) month consecutive period.

(b) The PM emissions from the ductile iron treatment process (EU-119) shall not exceed 0.04 pounds per hour.

(c) The PM_{10} emissions from the ductile iron treatment process shall not exceed 0.04 pounds per hour.

D.3.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following emission units shall be limited by the equations below:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$, where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	**Process Weight Rate** (tons per hour)	**Allowable PM Emission Rate** (pounds per hour)
EU-119 (Magnesium Treatment System)	24.0	34.5

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control device, DC-10.

Compliance Determination Requirements

D.3.4 Particulate Matter (PM)

In order to comply with Conditions D.3.1 and D.3.2, the baghouse (DC-10) for PM control shall be in operation and control emissions from the magnesium treatment system at all times that the system is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.5 Visible Emissions Notations

(a) Visible emission notations of the DC-10 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere once per shift. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (DC-10) used in conjunction with the magnesium treatment system, at least once per shift when the magnesium treatment system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the magnesium treatment system when venting to the atmosphere. A baghouse inspection shall be performed

within three (3) months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section C- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section C - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

(a) To document compliance with Condition D.3.1(a), the Permittee shall maintain records of the amount ductile iron treated in EU-119 per month.

(b) To document compliance with Condition D.3.4, the Permittee shall maintain records of visible emission notations of the magnesium treatment system stack exhaust once per shift.

(c) To document compliance with Condition D.3.5, the Permittee shall maintain the following:

(1) Records of the following operational parameters during normal operation when venting to the atmosphere once per shift:

(A) Inlet and outlet differential static pressure; and

(B) Cleaning cycle operation.

(2) Documentation of the dates vents are redirected from exhausting outside of the building to exhausting inside the building or vice versa.

(d) To document compliance with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition D.3.6 and the dates the vents are redirected.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Rochester Metal Product Corporation
Source Address: 616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address: P.O. Box 318, Rochester, Indiana 46975
Source Modification No.: 049-13878-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

Part 70 Source Modification Quarterly Report

Source Name: Rochester Metal Product Corporation
Source Address: 616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address: P.O. Box 318, Rochester, Indiana 46975
Source Modification No.: 049-13878-00002
Facilities: Three (3) electric induction furnaces, known as EU-131, 132 and 133
Parameter: Metal Melted
Limit: 5,833 tons of metal melted per month, total

YEAR: _____

Month	Furnace 131	Furnace 132	Furnace 133	Total
	Metal Melted tons	Metal Melted tons	Metal Melted tons	Metal Melted tons

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

Part 70 Source Modification Quarterly Report

Source Name: Rochester Metal Product Corporation
Source Address: 616 Indiana Avenue, Rochester, Indiana 46975
Mailing Address: P.O. Box 318, Rochester, Indiana 46975
Source Modification No.: 049-13878-00002
Facility: Magnesium Treatment System, known as EU-119
Parameter: Amount of Ductile Iron Treated
Limit: 210,240 tons per twelve (12) consecutive month period

YEAR: _____

Month	Amount of Ductile Iron Treated (tons)	Amount of Ductile Iron Treated (tons)	Amount of Ductile Iron Treated (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	**Rochester Metal Products Corporation**
Source Location:	**616 Indiana Avenue, Rochester, Indiana 46975**
County:	**Fulton**
SIC Code:	**3321**
Operation Permit No.:	**T 049-5999-00002**
Operation Permit Issuance Date:	**Not Yet Issued**
Minor Source Modification No.:	**MSM 049-13878**
Permit Reviewer:	**Mark L. Kramer**

The Office of Air Quality (OAQ) has reviewed a modification application from Rochester Metal Products Corporation relating to the change in emission factors and control efficiencies for an existing permitted gray and ductile iron foundry. The minor source modification that resulted from this request, MSM 049-12722 issued December 6, 2000, consisted of changes in emission factors and efficiencies of the control devices. That permit was appealed and as a result the pound per hour PM and PM_{10} emission limits are being revised to pound per ton limits for the electric induction furnaces. Also PMPs are required for all control devices and only the sand handling and shakeout facilities. The source also requested that the pressure drops across the baghouses be changed.

The following equipment is involved in this modification:

Melt Operations, consisting of the following:

(a) Two (2) natural-gas fired preheaters/charge handling system, identified as EU-118, modified in 1996, equipped with a baghouse DC-9, exhausted to Stack DC-9, rated at 7.0 million British thermal units per hour and 14.5 million British thermal units per hour for preheaters 1 and 2, respectively, charge capacity: 34.0 tons per hour of metal total.

(b) Three (3) electric induction furnaces, Nos. 1, 2 and 3, identified as EU-131, EU-132 and EU-133, all modified in 1997, No. 3 modified in 1999, equipped with a baghouse DC-13, exhausted to Stack DC-13, melt capacity: 13 tons per hour of metal total.

Disa 2 Processes, consisting of the following:

(c) One (1) Disa 2 muller and sand system, identified as EU-331, constructed in 1997, equipped with a baghouse DC-11, exhausted to Stack DC-11, capacity: 60.0 tons of sand per hour.

(d) One (1) Disa 2 pouring and mold cooling system, identified as EU-333, constructed in 1997, emissions uncontrolled and exhausted to Stack D333, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(e) One (1) Disa 2 casting, shakeout and cooling system, identified as EU-335, constructed in 1997, equipped with baghouses DC-11 and DC-12, exhausted to Stack DC-11 and exhausted internally to the building, capacity: 10.0 tons of metal per hour and 60.0 tons of sand per hour.

(f) One (1) Disa 2 casting handling system, identified as EU-432, constructed in 1997, equipped with a baghouse DC-12, exhausted internally through general ventilation, capacity: 10.0 tons of metal per hour.

Disa Shotblasting and Grinding

(g) One (1) Disa shotblasting system, identified as EU-411B, constructed in 1996, and EU-431, constructed in 1997, equipped with baghouse DC-12, exhausted internally through general ventilation, maximum capacity: 10.0 tons of metal per hour, each.

Magnesium Treatment System

(h) One (1) magnesium treatment system, identified as EU-119, modified in 1997, equipped with a baghouse DC-10, exhausted internally through general ventilation, maximum capacity: 24 tons of metal per hour.

History

On September 18, 2000, Rochester Metal Products Corporation submitted an application to the OAQ requesting to change the PM_{10} emission factor for pouring/mold cooling from 0.09 to 0.20 pounds of PM_{10} per tons of metal poured. In addition, control efficiencies on the various processes have been changed as shown in the following table:

Process	PM_{10} Existing Control Efficiencies (%)	PM_{10} Proposed Control Efficiencies (%)
Preheaters (DC-9)*	94.65	96.11
3 Electric Induction Furnaces (DC-13)*	88.53	91.20
Magnesium Treatment (DC-10)	99.9	
DISA Sand System (DC-11)*	97.88	98.41
DISA Casting/Shakeout (DC-12)*	94.58	95.93
DISA Pouring and Cooling	0.00	
DISA Casting Cooling (DC-12)	99.9	
DISA Shotblast (DC-12)	99.9	

* MSM 049-10821 had previously changed the control efficiencies for these processes.

A compliance stack test was completed on August 1, 2000, to verify the emission factors used for Rochester's pouring/mold cooling line as required by MSM 049-10821-00002, issued on November 3, 1999, required by CP 049-8548-00002, issued on October 17, 1997 and CP 049-9997-00002, issued March 4, 1999. On April 16, 1999, Rochester Metal Products requested a ninety (90) day

extension for stack testing. Stack testing was completed on October 1, 1999 and PM_{10} reflected the sum of the condensibles and the filterables summed to 0.16 pounds per ton of metal poured and cooled.

The results of this stack test were 0.057 pound of PM per ton of metal poured and 0.16 pound of PM_{10} per ton of metal poured, compared to emission factors in MSM 049-10821-00002 of 0.4 pound of PM per ton of metal poured and 0.09 pound of PM_{10} per ton of metal poured as shown in the following table. These stack test results have been verified and approved by IDEM, OAQ.

Pollutant	Factors in MSM 10821 (pound/ton)	Stack Test Results (pounds/ton)
PM	0.4	0.057
PM_{10}	0.09	0.16

The pouring and cooling emission factors of 0.40 pounds of PM per ton of poured and cooled and 0.20 pounds of PM_{10} per ton of metal poured and cooled of will be incorporated into the proposed permit.

Existing Approvals

The source applied for a Part 70 Operating Permit T 049-5999 on May 31, 1996 The source has been operating under previous approvals including, but not limited to the following:

(a) OP 25-06-9-021, issued on August 27, 1974,

(b) OP 25-06-85-0057, issued on June 2, 1981,

(c) AA 25-06-85-0057, issued on September 14, 1981,

(d) OP 25-06-89-0065, issued on June 1, 1989, renewed on December 6, 1993,

(e) OP 25-06-89-0066, issued on June 1, 1989, renewed on December 6, 1993,

(f) Registration not numbered, issued May 18, 1988,

(g) Exempt Status CP 049-2780-00002, not dated,

(h) CP 049-4112-00002, issued on July 3, 1995,

(i) AA 049-6464-00002, issued August 28, 1996,

(j) CP 049-8548-00002, issued October 17, 1997,

(k) AA 049-9555-00002, issued April 29, 1998,

(l) CP 049-9997-00002, issued on March 4, 1999,

(m) AA 049-11283-00002, issued on October 15, 1999,

(n) AA 049-11331-00002, issued on November 1, 1999,

(o) MSM 049-10821-00002, issued on November 3, 1999, and

(p) MSM 049-12722-00002, issued on December 6, 2000.

Recommendation

The staff recommends to the Commissioner that the Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on February 2, 2001.

Calculations

(a) Since no equipment, control devices, emission factors or control efficiencies or production limits are being changed the potential to emit before and after controls remains the same as that calculated in support of MSM 049-12722-00002 issued on December 6, 2000.

(b) The pound per ton limits which are replacing Condition D.1.1(c) and D.1.1(d) in MSM 049-12722-00002 issued on December 6, 2000 were calculated as follows:

PM: 3.45 tons of PM per year / 69,996 tons of metal melted per year X 2,000 pounds per ton = 0.0986 pounds of PM per ton of metal melted.

PM_{10} : 2.65 tons of PM_{10} per year / 69,996 tons of metal melted per year X 2,000 pounds per ton = 0.0757 pounds of PM_{10} per ton of metal melted.

(c) The requirement from CP 049-8548, issued October 17, 1997, Condition No. 11(a) established that the baghouse DC-13 shall operate at all times that the melting process is in operation and that the PM emissions from the melting process shall not exceed 1.43 pounds per hour and that the PM_{10} emissions from the melting process shall not exceed 1.43 pounds per hour as well as the requirement from MSM 049-10821 that the PM_{10} emissions from the melting process shall not exceed 0.788 pounds per hour have been replaced by the PM and PM_{10} limits in (b) above.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-049-5999-00002) application on May 31, 1996. The changes proposed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability

The rules and conditions cited in MSM 049-12722-00002 are still applicable and have not been repeated herein. In addition, the allowable PM emission rates pursuant to 326 IAC 6-3-2 have been incorporated as follows:

326 IAC 6-3-2 (Process operations: particulate emission limitations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the following emission units shall be limited by the equations below:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67,}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	**Process Weight Rate** (tons per hour)	**Allowable PM Emission Rate** (pounds per hour)
EU-118 (Preheaters/Charge Handling)	34.0	41.1
EU-131 - 133 (Electric Induction Furnaces	13.0 total	22.9 total
EU-331 (Disa 2 Muller & Sand System)	60.0	46.3
EU-333 (Disa 2 Pouring and Mold Cooling)	70.0	47.8
EU-335 (Disa 2 Casting, Shakeout and Cooling)	70.0	47.8
EU-432 (Disa 2 Casting Handling System)	10.0	19.2
EU-411B and EU-431 (Disa Shot Blasting System)	10.0 each	19.2 each
EU-119 (Magnesium Treatment System)	24.0	34.5

Testing Requirements

Since the PM and PM_{10} emission limitations for the three (3) electric induction furnaces exhausted through Stack DC-13 have changed in this proposed permit, stack testing is being required to show compliance. This stack testing will fulfil the stack testing requirements of the Part 70 Operating Permit for Stack DC-13.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The preheaters/charge handling, the magnesium treatment, the Disa sand handling, the Disa casting/shakeout, Disa casting/ cooling, the Disa shot blast and the three (3) electric induction furnaces have applicable compliance monitoring conditions as specified below:

(1) Visible emissions notations of the preheaters/charge handling, the magnesium treatment, the Disa sand handling, the Disa casting/shakeout, Disa casting/ cooling, the Disa shot blast and the three (3) electric induction furnaces stack exhausts Stacks DC9 through DC13 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C of the proposed permit - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of the proposed permit.

(2) The Permittee shall take readings of the total static pressure drop across the baghouses, once per shift. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across baghouses known

as DC9 through DC13 shall be maintained within the range of 2 and 8 inches of water. The Compliance Response Plan for these baghouses shall contain trouble-shooting contingency and response steps for when the pressure reading is outside of this range for any one reading. Failure to take response steps in accordance with Section C of the proposed permit - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of the proposed permit.

(3) An inspection shall be performed each calender quarter of all bags controlling the two (2) preheaters/charge handling system and the three (3) electric induction furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), 326 IAC 2-2 and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this gray iron foundry shall be subject to the conditions of the attached proposed Source Modification Permit No. 049-13878-00002.